

# Material: AISI 12L14

## Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** AISI 12L14 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries

**Grade Belongs to the Industry:** Steel and Bar

Chemical Composition		
Carbon	C %	0.150 max.
Manganese	Mn %	0.850 - 1.150
Phosphorus	P %	0.040 - 0.090
Sulphur	S %	0.260 - 0.350
Lead	Pb %	0.150 - 0.350
Aluminium	Al %	0.020 max.
Niobium	Nb %	0.025 max.
Vanadium	V %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As Raw or Annealing or Normalizing or Hardening and Tempering

Mechanical Properties	
Tensile Strength in Mpa	390 - 540
Yield Strength in Mpa	230 min.
Elongation in %	10 min.
Reduction of Area in %	35 - 45
Hardness in HB	121 - 163
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G12140	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
12L14	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
A 1040 12L14	ASTM	USA	Steel
SA-29 12L14	ASME	USA	Steel
A 510 12L14	ASTM	USA	Wire Rod, Round Wire and Steel
A 519 12L14	ASTM	USA	Tubing
A 576 12L14	ASTM	USA	Steel and Bar

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